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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,300	08/18/2003	Philip Victor Harman	006020.00025	J991
22907 7590 12/11/2007 BANNER & WITCOFF, LTD. 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051			EXAMINER KIM, CHONG R	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 12/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/642,300	HARMAN, PHILIP VICTOR	
	Examiner	Art Unit	
	Charles Kim	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/586,869.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 19, 2007 has been entered.

Response to Amendment and Arguments

2. Applicant's amendment filed on November 19, 2007 has been entered and made of record.

3. Applicant's arguments, see pages 3-4, with respect to the rejections of claims 2 and 4 under 35 U.S.C. 103(a) as being unpatentable over Walker and Trika have been fully considered and are persuasive. The rejections of claims 2 and 4 over Walker and Trika have been withdrawn.

4. Applicant's arguments with regards to the 103(a) rejection over Tseng and Trika have been fully considered but they are not persuasive. Applicant essentially argues (page 5) that the depth map D_c^t is not "received" in Tseng. The Examiner disagrees. As illustrated in figure 2, Tseng clearly discloses depth map data D_c^t that is generated in the depth estimator 10 and received by the multiplexer 19, where the depth map data is embedded in a portion of the video signal in response to the received data [see also col. 3, ll. 55-59, col. 4, ll. 49-51, and col. 5, ll.

49-51]. Therefore, the combination of Tseng and Trika still disclose the features recited in claims 2 and 4, as amended.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Tseng et al., U.S. Patent No. 5,617,334 ("Tseng") and Trika et al., U.S. Patent No. 6,630,931 ("Trika").

Referring to claim 2, Tseng discloses a method comprising:

- a. receiving 2D images (I_c^1) and depth map data (D_c^1) of a depth map relating to the 2D images (col. 3, lines 47-62);
- b. responsive to the receiving, embedding the depth map data in a portion of a video signal including the 2D image data which does not obscure or overwrite the 2D image data, and without loss of fidelity in a relative range of values in the depth map (col. 5, lines 49-51); and
- c. transmitting the video signal (col. 5, lines 49-56).

Tseng does not explicitly disclose that the transmitted video signal is configured to convert the 2D images for viewing in a stereoscopic viewing system. However, this feature was exceedingly well known in the art. For example, Trika discloses using a transmitted video signal

comprising 2D image data and depth map data that is configured to convert 2D images for viewing in a stereoscopic viewing system (abstract).

Tseng and Trika are combinable because they are both concerned with multi-viewpoint imaging methods using 2D images and depth map data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Tseng in view of Trika. The reason for doing so would have been to enhance the flexibility of the multi-viewpoint image processing method. Therefore, it would have been obvious to combine Tseng with Trika to obtain the invention as specified in claim 2.

Referring to claim 4, Tseng further discloses that the depth map data is embedded in an MPEG data stream of a digital television signal (col. 4, lines 48-50).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Kim whose telephone number is 571-272-7421. The examiner can normally be reached on Mon thru Thurs 8:30am to 6pm and alternating Fri 9:30am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'C. Kim', with a horizontal line extending to the right.

Charles Kim
Patent Examiner
Art Unit 2624
chongr.kim@uspto.gov

November 26, 2007